

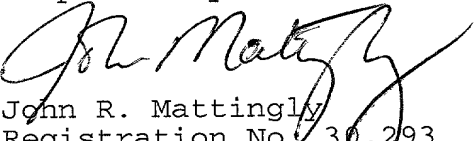
carried on alumina, a catalyst of Cu carried on alumina, a catalyst of Mn carried on alumina, a catalyst of Pd and W carried on titania and a catalyst of Co carried on alumina.

18. (Amended) An apparatus for the decomposing a fluorine compounds as claimed in claim 12, wherein said apparatus further comprises a gas scrubbing tower removing hydrogen fluoride and other water soluble components from a gas discharged from said reactor by contacting said gas with water or an alkaline aqueous solution.

**REMARKS**

Examination is respectfully requested.

Respectfully submitted,

  
John R. Mattingly  
Registration No. 30,293  
Attorney for Applicants

MATTINGLY, STANGER & MALUR  
1800 Diagonal Road, Suite 370  
Alexandria, Virginia 22314  
(703) 684-1120  
Date: September 13, 2001

## MARKED UP VERSION OF REWRITTEN CLAIMS

5. (Amended) A process for the decomposition of fluorine compounds as claimed in [one of] claim[s] 1, [3 and 4,] wherein said a catalyst for the decomposition of at least one of CO, SO<sub>2</sub>F<sub>2</sub> or N<sub>2</sub>O contains at least one selected from Pd, Pt, Cu, Mn, Fe, Co, Rh, Ir and Au in the form of a metal or an oxide.

7. (Amended) A process for the decomposition of fluorine compounds as claimed in claim 1 [or 3], wherein said a catalyst for the decomposition oft least one of CO, SO<sub>2</sub>F<sub>2</sub> or N<sub>2</sub>O is selected from a catalyst of Pd and La carried on alumina, a catalyst of Pt and La carried on alumina, a catalyst of Rh and La carried on alumina, a catalyst of Au and La carried on alumina, a catalyst of Ir and La carried on alumina, a catalyst of Pd carried on alumina, a catalyst of Pt carried on alumina, a catalyst of Cu carried on alumina, a catalyst of Mn carried on alumina, a catalyst of Pd and W carried on titania and a catalyst of Co carried on alumina.

8. (Amended) A process for the decomposition of fluorine compounds as claimed in [one of] claim[s] 1, [3 and 4,] wherein said gas having been decomposed by contacting with said catalyst for the decomposition of at least one of CO, SO<sub>2</sub>F<sub>2</sub> or N<sub>2</sub>O is put through water or an alkaline aqueous solution to remove hydrogen fluoride and a water-soluble component contained in said gas.

9. (Amended) A process for the decomposition of fluorine compounds as claimed in claim 1 [or 3], wherein said fluorine compounds decomposition catalyst contains aluminum and nickel in the form of an oxide, and a ratio thereof in atomic ratio is from 50 to 99 mol% for aluminium and from 50 to 1 mol% for nickel.

10. (Amended) A process for the decomposition of fluorine compounds as claimed in [one of] claim[s] 1, [3 and 4,] wherein a reaction temperature for said a catalyst for the decomposition of at least one of CO, SO<sub>2</sub>F<sub>2</sub> or N<sub>2</sub>O is from 650 to 850°C.

16. (Amended) An apparatus for the decomposing a fluorine compounds as claimed in claim 12 [or 14], wherein said catalyst for the decomposition of at least one of CO, SO<sub>2</sub>F<sub>2</sub> or N<sub>2</sub>O contains at least one selected from Pd, Pt, Cu, Mn, Fe, Co, Rh, Ir and Au in the form of a metal or an oxide.

17. (Amended) An apparatus for the decomposing a fluorine compounds as claimed in claim 12 [or 14], wherein said catalyst for the decomposition of at least one of CO, SO<sub>2</sub>F<sub>2</sub> or N<sub>2</sub>O is selected from a catalyst of Pd and La carried on alumina, a catalyst of Pt and La carried on alumina, a catalyst of Rh and La carried on alumina, a catalyst of Au and La carried on alumina, a catalyst of Ir and La carried on alumina, a catalyst of Pd carried on alumina, a catalyst of Pt carried on alumina, a catalyst of Cu carried on alumina, a catalyst of Mn carried on alumina, a catalyst of Pd and W carried on titania and a catalyst of Co carried on alumina.

18. (Amended) An apparatus for the decomposing a fluorine compounds as claimed in [one of] claim[s] 12, [14 and 15,] wherein said apparatus further comprises a gas scrubbing tower removing hydrogen fluoride and other water soluble components from a gas discharged from said reactor by

contacting said gas with water or an alkaline aqueous solution.

TOP SECRET